

Substitute Specification

ABSTRACT

A method of producing reticular structures, particularly metallic reticular structures, as well as a device suitable for the production thereof. The method and device enable continuous and/or automated production of such structures, and particularly, large-scale automated production of large-dimensioned reticular structures. A reticulated foam pre-structure is placed into a first container and infiltrated with a refractory material. After solidification, the mold formed by the refractory material is removed from the first container and the foam pre-structure stripped from the mold. The mold is then pre-heated and placed into a second container and infiltrated with a molten substance that forms the reticular structure when solidified. The filled mold may be covered with a solid jacket as a means of controlling the rate and progression of solidification of the molten substance to form a fine-grained, bubble-free structure.